



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735,820	12/16/2003	Keisuke Asaba	2523-082	2877
7590	11/30/2004		EXAMINER [REDACTED]	MULLINS, BURTON S
ISRAEL GOPSTEIN, Esq. P.O. BOX 9303 SILVER SPRING, MD 20916-9303			ART UNIT [REDACTED]	PAPER NUMBER 2834

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/735,820	ASABA, KEISUKE <i>An</i>	
	<b>Examiner</b>	<b>Art Unit</b>	
	Burton S. Mullins	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

#### A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 16 December 2003.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) 1-16 is/are allowed.
- 6) Claim(s) \_\_\_\_\_ is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 16 December 2003 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) All    b) Some \* c) None of:
      1. Certified copies of the priority documents have been received.
      2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
      3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Specification*

2. The disclosure is objected to because of the following informalities:

Several terms are non-idiomatic, e.g., "conductive-use coil" (p.3, line 4) should be simply -conductive coil--.

The solidus used throughout the specification in "thin/round" (e.g., p.3, lines 19 and 22) and "upper/lower" (e.g., p.6, line 11 & p.11, lines 7, 10 & 25) is improper.

In the "Summary of the Invention" section, specific claims should not be referred to, as those claims may change during prosecution.

On p.10, line 1, Fig.4 does not show the "wire connection-use protrusions 15a" as stated. Should this be Fig.2?

Appropriate correction is required.

### *Claim Objections*

3. Claims 1-16 are objected to because of the following informalities:

In claim 1, "conductive-use coil" (line 3) should be simply -conductive coil--. On line 4, change "stands opposed to" to -opposes--. On line 14, delete ", while multiple" and

Art Unit: 2834

replace with ---and a plurality of said---. On line 17, change “thin/round” to --thin— since “annulus-shaped” is by definition “round”.

In claim 2, change “thin/annulus” to --thin— since “ring-shaped” is by definition annular.

In claim 3, change “through the mediation of” to -by means of--.

In claim 4, delete “whose upper-side reinforcing plate mentioned above” and replace with –wherein the upper-side reinforcing plate--. On line 3, change “this” to -the--.

In claim 5, “conductive-use coil” (line 3) should be simply -conductive coil--. On line 13, delete “is 4-polar-magnetization...3” and replace with --comprises four poles arranged in the radial direction and three of said coils--. On line 16, delete “for commutators...are used, with 2” and replace with --a six-segment commutator is fixed around the rotating axis, with two--.

In claim 6, “conductive-use coil” (line 3) should be simply -conductive coil--. On line 13, delete “is 2-polar-magnetization...3” and replace with --comprises two poles arranged in the circumferential direction and three of said coils--. On line 16, delete “for commutators...are used, with 2” and replace with --a three-segment commutator is fixed around the rotating axis, with two--.

In claim 7, delete the comma on line 3 and the first and second commas on line 4. On line 6, delete “, in a revolution possible way,”.

In claim 8, line 4, change “bolder” to -holder--.

In claim 9, line 3, change “in lirie” to --to correspond--. Change “extenal” to --external--. Change “upper/lower” to ---upper and lower---.

In claim 10, line 3, change “radius” to ---radial--. Delete the duplicate period.

In claim 11, line 2, change “aforementioned” to -said--. Delete the second and third commas on line 3. On line 4, change “with this” to -said--. On lines 5-6, delete “, in a revolution possible way,”.

In claim 12, line 2, change “aforementioned” to -said--. Delete the second and third commas on line 3. On line 4, change “with this” to -said--. On lines 5-6, delete “, in a revolution possible way,”.

In claim 13, line 2, change “in lirie” to --to correspond---. Change “extenal” to --external---. Change “upper/lower” to ---upper and lower---.

In claim 14, line 2, change “in lirie” to --to correspond---. Change “extenal” to --external---. Change “upper/lower” to ---upper and lower---.

In claims 15 and 16, line 3, change “radius” to -radial— and delete the duplicate period.

Appropriate correction is required.

***Allowable Subject Matter***

4. Claims 1-16 are allowed pending changes to correct the objections noted above. The prior art does not teach or suggest the claimed coreless motor including, inter alia, a ring shaped coil yoke, a conductor coil connected to a ring-shaped magnet (claims 1, 5 and 6), the coil further comprising a flat arc portion and a curved-and-folded portion, with a flange for attachment of multiple coils (claim 1).

EP '694 is the closest art, but comprises coils 9 fixed to the stator and coil yoke 3b (Fig.1), with an air gap G between the coils 9 and rotor magnet 2. The coils 9 in EP '694 are not connected to the ring-shaped magnet as claimed in claims 1, 5 and 6.

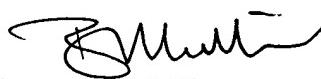
***Conclusion***

5. This application is in condition for allowance except for the formal matters noted above. Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Burton S. Mullins whose telephone number is 571-272-2029. The examiner can normally be reached on Monday-Friday, 9 am to 5 pm. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Burton S. Mullins

BURTON S. MULLINS  
PRIMARY EXAMINER